

APRIL/MAY 2023

CBT41/BBT41 — IMMUNOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. **Comment on lysozyme in innate immunity.**
2. **Note on polyclonal antibody.**
3. **Draw the 3D structure of immunoglobulin.**
4. **Define humanized antibody.**
5. **Comment on germinal centre.**
6. **Comment on CTL.**
7. **Note on positive selection.**
8. **Comment on APCs.**
9. **Define immunotolerance.**
10. **What is Pernicious anemia?**

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Illustrate the chemical components involved in innate immunity.

Or

- (b) Differentiate antigens from super antigen.

12. (a) Describe about antibody dependent cell mediated cytotoxicity.

Or

- (b) Write a note on hybridoma technology.

13. (a) Describe about cytokines.

Or

- (b) Explain about humoral immune response.

14. (a) Illustrate about the role of immunotolerance.

Or

- (b) Describe about mechanism of autoimmunity.

15. (a) Explain about ABO blood grouping.

Or

- (b) List out the complications in blood transfusion.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Describe in detail about the organs of immune system.

17. Write about antigens, superantigens, haptens, adjuvants and their properties.

18. Describe the process of maturation, activation and differentiation of B cells.

19. Write a detailed account on MHC.

20. Describe the immediate hyper sensitivity reactions with a suitable example.